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[GB/GB]; 17 Dene Street Gardens, Dorking, Surrey RH4 2DN (GB). **DE ANTONIS, Paul** [GB/GB]; 3 Valve Drive, Horsham, West Sussex RH12 2JU (GB).

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(74) Agent: **BARKER BRETTELL**; 138 Hagley Road, Edgbaston, Birmingham B16 9PW (GB).

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(71) Applicant (for all designated States except US): **CXR LIMITED** [GB/GB]; Unit 5, Riverside Business Centre, Walnut Tree Close, Guildford GU1 4UG (GB).

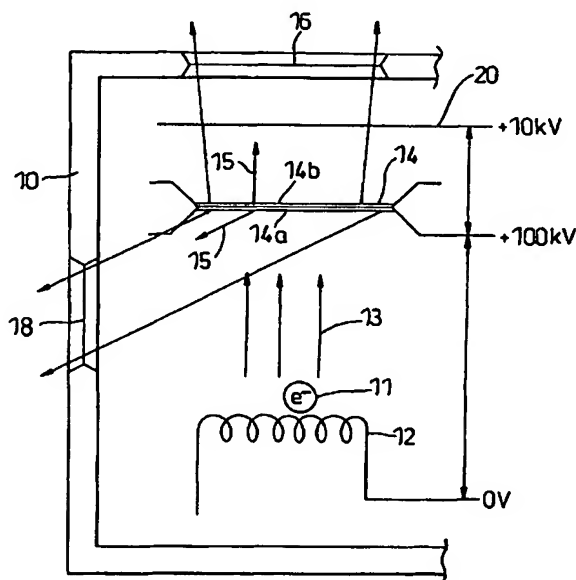
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(72) Inventors; and

(75) Inventors/Applicants (for US only): **MORTON, Edward, James** [GB/GB]; 37 Banders Rise, Guildford, Surrey GU1 2SL (GB). **LUGGAR, Russell, David**

[Continued on next page]

(54) Title: X-RAY TUBES



(57) Abstract: An X-ray tube comprises an electron source in the form of a cathode (12), and an anode (14) within a housing (10). The anode (14) is a thin film anode, so that most of the electrons which do not interact with it to produce X-rays pass directly through it. X-rays can be collected through a first window (16) directly behind the anode (14), or a second window (18) to one side of the anode. A retardation electrode 20 is located behind the anode 14 and is held at a potential which is negative with respect to the anode 14, and slightly positive with respect to the cathode (12). This retardation electrode (20) produces an electric field which slows down electrons passing through the anode (14) so that, when they interact with it, they are at relatively low energies. This reduces the heat load on the tube.



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# INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H01J35/04 H01J35/08

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 23, 10 February 2001 (2001-02-10) & JP 2001 176408 A (NEW JAPAN RADIO CO LTD), 29 June 2001 (2001-06-29) abstract; figures 2-4	1-11
Y	EP 0 432 568 A (GENERAL ELECTRIC COMPANY) 19 June 1991 (1991-06-19) page 3, column 3, line 22 - line 37	1-11
Y	PATENT ABSTRACTS OF JAPAN vol. 016, no. 294 (E-1225), 29 June 1992 (1992-06-29) & JP 04 079128 A (NEC CORP), 12 March 1992 (1992-03-12) abstract; figure 1	5
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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Krauss, J

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